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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/685,472

10/16/2003

Ashvinkumar Jayantilal Sanghvi

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SHOOK, HARDY & BACON L.L.P.

(c/o MICROSOFT CORPORATION)

INTELLECTUAL PROPERTY DEPARTMENT

2555 GRAND BOULEVARD

KANSAS CITY, MO 64108-2613

EXAMINER

GOODCHILD, WILLIAM J

ART UNIT

PAPER NUMBER

2445

MAIL DATE

DELIVERY MODE

02/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/685,472	Applicant(s) SANGHVI, ASHVINKUMAR JAYANTILAL	
	Examiner WILLIAM J. GOODCHILD	Art Unit 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1--44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/08/2008 has been entered.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-44 are directed to a method or a computerized storage system but fails to recite any hardware elements in the claim body, which renders the claim solely as a software implementation and non-statutory for failing to satisfy a statutory category. In order for a claim to be statutory, it must fall within a process, machine, manufacture, or a composition of matter. Software does not fall within a statutory category since it is not

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a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

A method claim should positively explicitly recite in the **body** of the claim, the particular machine or apparatus, or recite a step that inherently involves the use of a particular machine or apparatus.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 4-11, 13-18, 28-35 and 37-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helsper et al., (US Publication No. 2003/0139905), (hereinafter Helsper), and further in view of McGee et al., (International Publication No. WO 03/009140), (hereinafter McGee).

Regarding claims 1, 10, 28, 34 and 42, Helsper discloses creating a signature representative of the process [Helsper, paragraph 12, lines 7-11]; continuously updating the created signature with a weighting scheme [Helsper, paragraph 13, lines 8-11 and paragraph 14, lines 11-16]; and

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detecting abnormalities based upon the continuously updated signature [Helsper, paragraph 11, lines 1-9];

wherein the process is related to usage of networked computing devices in a datacenter [Helsper, paragraph 17, lines 5-8]; and

wherein the weighting scheme consists of a first weighting factor that represents a continuously-updated signature weight [Helsper, paragraph 79, W_G] and a second weighting factor that represents a current data weight [Helsper, paragraph 50, 18-24, W_C].

Helsper does not specifically disclose wherein the signature includes information related to time sensitive averaging that accounts for variation in a business cycle.

However, McGee, in the same field of endeavor discloses adapting the process to cyclic patterns of activity, [McGee, paragraphs 12 and 41].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include cyclic patterns of activity in order to reduce the number of false positives during busy (or non-busy) times.

Regarding claims 2, 11, 29 and 35, Helsper-McGee further discloses creating a signature comprises calculating an average and a standard deviation [McGee, paragraphs 40 and 48].

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Regarding claims 4, 13 and 37, Helsper-McGee further discloses wherein creating a signature comprises initially repeating a running average and standard deviation through a plurality of intervals [McGee, paragraphs 40 and 48].

Regarding claims 5, 14, 30 and 38, Helsper-McGee further discloses wherein updating the created signature comprises ensuring that recently-recorded data has a greater impact than older data by setting the second weighting factor to a value greater than the first weighting factor [Helsper, paragraph 57].

Regarding claims 6, 15, 31 and 39, Helsper-McGee further discloses updating the created signature comprises utilizing a moving average over a time to account for events occurring at unexpected times [McGee, paragraph 48].

Regarding claims 7, 16, 32 and 40, Helsper-McGee further discloses detecting abnormalities comprises determining if measured values are above an upper threshold or below a lower threshold [Helsper, paragraph 11].

Regarding claims 8, 17, 33 and 41, Helsper-McGee further discloses calculating upper and lower threshold limits based on jitter offset [Helsper, paragraph 5].

Regarding claims 9 and 18, Helsper-McGee further discloses a computer readable medium having computer executable instructions for performing the method of claim 1

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[Helsper, paragraph 17].

Regarding claim 43, Helsper-McGee further discloses converting the numeric data streams to multiple sub-states [McGee, paragraphs 44-45].

5. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helsper-McGee as applied to claim 42 above, and further in view of Spoerre et al., (US Patent No. 5,602,761), (hereinafter Spoerre).

Regarding claim 44, Helsper-McGee does not specifically disclose determining a root cause of an abnormality based on the state.

However, Spoerre, discloses a reasoning process in identifying faults and their possibilities [Spoerre, column 6, lines 57-65].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include determining the reasons for a fault in order to increase the usefulness of the system.

Response to Arguments

6. Applicant's arguments with respect to claims 1-44 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Examiner's Note: Examiner has cited particular paragraphs / columns and line numbers in the reference(s) applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the cited passages as taught by the prior art or relied upon by the examiner.

Should applicant amend the claims of the claimed invention, it is respectfully requested that applicant clearly indicate the portion(s) of applicant's specification that support the amended claim language for ascertaining the metes and bounds of applicant's claimed invention

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM J. GOODCHILD whose telephone number is (571)270-1589. The examiner can normally be reached on Monday - Friday / 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrice Winder/
Primary Examiner, Art Unit 2445

WJG
02/12/2009